

Application No.: 10/671,866Docket No.: 1013-028**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Currently amended) ~~Fluid distribution flow adjustment device according to claim 1, wherein~~ Fluid distribution flow adjustment device comprising a first body having a fluid inlet passage, a second body having a fluid outlet passage, the fluid inlet passage opening up at one end facing a turnable disk having holes, the disk and outlet passage being arranged so that there is always at least one of the holes facing the outlet passage, regardless of the position of the disk, to enable fluid distribution without any risk of interruption even during adjustment of the flow in response to turning of the disk, the disk and the outlet passage being arranged so gradual adjustment of the flow is adapted to occur in response to gradual turning of the disk as a function of at least one of (1) the diameter of at least one of the holes and (2) the density of the holes facing the outlet passage, the disk includes including at least two concentric rows of holes with precise dimensions, the holes in each row being offset from the holes in the other row and at a regular angular spacing, the diameter diameters of the holes encountered in sequence in a given rotation direction varying gradually for each successive hole of two different adjacent rows, the spacing between successive holes in two adjacent rows being less than the diameters of the fluid

Application No.: 10/671,866**Docket No.: 1013-028**

inlet passage and outlet passage, the fluid outlet or inlet passage facing several holes in the disk to enable gradual flow adjustment without any risk of interrupting the fluid flow.

4. *(Currently amended)* ~~Fluid distribution flow adjustment device according to claim 1, further including~~ Fluid distribution flow adjustment device comprising a first body having a fluid inlet passage, a second body having a fluid outlet passage, the fluid inlet passage opening up at one end facing a turnable disk having holes, the disk and outlet passage being arranged so that there is always at least one of the holes facing the outlet passage, regardless of the position of the disk, to enable fluid distribution without any risk of interruption even during adjustment of the flow in response to turning of the disk, the disk and the outlet passage being arranged so gradual adjustment of the flow is adapted to occur in response to gradual turning of the disk as a function of at least one of (1) the diameter of at least one of the holes and (2) the density of the holes facing the outlet passage, a drive for turning the disk, the drive including a knob adapted to turn in at least one of the bodies and fixed in rotation with the disk so that the knob can be turned to adjust the flow, the knob including a passage for enabling fluid circulation as far as the precision holes or cut out in the fluid flow adjustment disk.

5. *(Currently amended)* Fluid distribution flow adjustment device according to claim ~~[[1]]~~ 24, wherein ~~a lower part of the second body includes the fluid outlet passage, the outlet passage having~~ has a diameter facing the disk greater than the spacing between at least two adjacent precision holes in the same row in the disk to assure that the outlet passage is always facing at least two precision holes in the flow adjustment disk.

Application No.: 10/671,866**Docket No.: 1013-028**

6. (Currently amended) Fluid distribution flow adjustment device according to claim [[1]] 4, wherein the installation is made leak tight by O-rings arranged in grooves around the periphery of the cylindrical surface of the knob, and on the internal peripheral surface of a skirt of the knob and the lower part and upper part of the body ~~containing~~ including the inlet tube and the outlet tube respectively, and by an O-ring ~~placed~~ located between the disk and the outlet tube in a larger diameter drilling than the fluid outlet tube.

7. (Currently amended) Fluid distribution flow adjustment device according to claim [[1]] 4, further including a seal between the disk and the inlet and outlet passage, the seal including first and second O-rings, the first O-ring being in contact with a first face of the disk and seated in a wall of the first passage, the second O-ring being in contact with a second face of the disk and seated in a wall of the second passage between the disk and the outlet passage, the second O-ring being located between the disk and the inlet passage, both in drillings with a diameter larger than their corresponding tubes and facing the hole(s) or the cut out and each other.

8. (Currently amended) Fluid distribution flow adjustment device according to claim [[1]] 4, wherein the knob is knurled on its external periphery and is arranged on at least one face of one of the bodies so that it can be turned manually.

9. (Currently amended) Fluid distribution flow adjustment device according to claim [[1]] 4, wherein the first and second bodies are formed of moulded plastic and at least partially

Application No.: 10/671,866**Docket No.: 1013-028**

enclose the knob and the disk.

10. (Currently amended) Fluid distribution flow adjustment device according to claim [[1]] 4, wherein the diameter of the disk is smaller than the diameter of the knob.

11. (Currently amended) Fluid distribution flow rate adjustment device comprising a fluid inlet passage and a fluid outlet passage, the fluid inlet passage opening up at one end facing an opening arrangement in a turnable disk, the disk and opening arrangement being turnable about an axis extending generally in a direction of flow of fluid from the inlet passage to the outlet passage through the opening arrangement so that as the disk is turned about the axis, fluid flowing from the inlet passage to the outlet passage flows through different sized areas of the opening arrangement to provide different flow rates between the inlet and outlet passages as the disk is turned about the axis, the opening arrangement and outlet passage being arranged so that there is always a portion of the opening arrangement between the inlet passage and the outlet passage regardless of the rotary position of the opening arrangement about the axis to enable fluid distribution from the inlet passage to the outlet passage without interruption, even during adjustment of the flow rate in response to turning of the opening arrangement, the opening arrangement and the passages being arranged so gradual adjustment of the flow rate is adapted to occur in response to gradual turning of the opening arrangement about the axis, the opening arrangement including a series of holes such that the sizes of the areas of the holes for the fluid flowing between the passages changes as the disk is turned about the axis, the holes being in first and second arcuate groups, the holes in the first and second groups being at different radii relative to the axis, the holes in the first group being at staggered circumferential locations

Application No.: 10/671,866**Docket No.: 1013-028**

relative to the holes in the second group.

12. (Cancelled)

13. (Currently amended) Device according to claim ~~[[12]]~~ 11, wherein the holes have areas for fluid flowing between the passages that change in size monotonically as the disk is turned about the axis.

14. (Cancelled)

15. (Currently amended) Device according to claim 13, wherein individual ones of the holes have areas of differing sizes for fluid flowing between the passages as the disk is turned about the axis.

16-23. (Cancelled)

24. (New) Fluid distribution flow adjustment apparatus comprising a body arrangement having a fluid outlet and a fluid inlet opening up at one end facing a rotatable disk including ~~circular~~ holes such that the whole diameter of at least one of the holes always is facing the outlet regardless of the position of the disk about its axis of rotation~~[[,]]~~; the fluid outlet, fluid inlet, the body arrangement and the disk being arranged to enable ~~the fluid distribution~~ fluid to flow from the inlet to the outlet without interruption even during rotation of the disk to provide gradual adjustment of the fluid flow rate from the inlet to the outlet as a function of the diameter

Application No.: 10/671,866**Docket No.: 1013-028**

of the hole(s) and/or the density of the holes facing the outlet.

25. (New) The apparatus of claim 24, wherein the disk includes at least two concentric rows of holes, the holes in each row being offset from the holes in the other row and being at a regular angular spacing, the diameters of the holes encountered in sequence in a given rotation direction of disk varying gradually for each successive hole of two different adjacent rows, the spacing between successive holes in two adjacent holes being less than the diameters of the fluid inlet and outlet, the fluid outlet or inlet facing plural holes in the disk to enable flow adjustment without interrupting the fluid flow.

26. (New) The apparatus of claim 24, further including a drive for turning the disk, the drive including a knob adapted to turn in the body arrangement and fixed in rotation with the disk so that the knob can be turned to adjust the flow, the knob including a passage for enabling fluid flow through the holes.